UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,694	01/02/2004	Robert DeSantis	IBMP014/SVL920040508US1	3817

63056 7590 09/14/2007	**EXAMINER**
MOLLBORN PATENTS	NGUYEN, PHILLIP H
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ART UNIT	PAPER NUMBER
2191	

NOTIFICATION DATE	DELIVERY MODE
09/14/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/750,694	DESANTIS, ROBERT
	Examiner	Art Unit
	Phillip H. Nguyen	2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 July 2007</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)　　　　　4)☐ Interview Summary (PTO-413)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)　　　　Paper No(s)/Mail Date. _____.
3)☐ Information Disclosure Statement(s) (PTO/SB/08)　　5)☐ Notice of Informal Patent Application
　　Paper No(s)/Mail Date _____.　　　　　　　　　6)☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on 7/31/2007.

2. Claims 1-4, 8, 11-20 have been amended.

3. Claims 1-20 remain pending and have been considered below.

Response to Arguments

4. Applicant's arguments, see page 9 of the amendment that Nelson's script does not contain calls to a server-side software method in accordance with the API", filed 7/31/2007, with respect to claim 1 have been fully considered and are persuasive. The 35 USC 102(b) rejection of claims 1 and 4 has been withdrawn.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nelson et al. (United States Patent No.: US 6,188,400 B1), in view of Merrill et al.

(United States Patent No.: US 6,369,821 B2).

As per claims 1 and 20:

Nelson discloses:

- although, Nelson does not explicitly disclose creating an API on the server side

  for a server-side software method. It is inherent in Nelson ("**API and TABLE I**"

  Col 5, line 31-65);

- automatically creating an interpreted script language program that contains calls

  to the server-side software method in accordance with the API ("**converter 27**

  generates the client-side script" Col 8, line 53-54); and

- sending the created interpreted script language program to the client side

  ("**transmits the script to web browser via network**" Col 8, line 54-55).

  Nelson does not explicitly disclose:

- interpreted script language program contains calls to server-side software

  method.

  However, Merrill discloses:

- interpreted script language program contains calls to server-side software

  method (see at least col. 35, lines 3-15 "**to execute the script code, the**

  browser used the interpreter to translate the code and then accesses the

  OLE control interface in response to references to the control interface in

the script code...when the script code references the character control, the

browser accesses the animation server" – the script contains calls to the

server-side method so when executing the script on the client side, it invokes the

server-side method to allow the browser access the server).

Therefore, it would have been obvious to one having an ordinary skill in the art at the

time the invention was made to include the invoking the server process of Merrill in

Nelson's approach. One would have been motivated to allow a central server to store

software programs to prevent from having multiple version of copied software programs

store at multiple client side. By doing this, reducing software redundancy, the client side

does not need to have extra memory for storing the software program, etc.

As per claim 2:

Merrill further discloses:

- executing the interpreted script language program on the client side to call the

    server side software method (see at least col. 35, lines 3-15 **"to execute the**

    script code, the browser used the interpreter to translate the code and then

    accesses the OLE control interface in response to references to the control

    interface in the script code...when the script code references the character

    control, the browser accesses the animation server" - which means, when

    executing the script on the client side, it invokes the server so that the

    browser can access the server).

As per claim 4:

Nelson further discloses:

- wherein the interpreted script language program is executed by a non-modified standard browser program (see at least col. 7, lines 27-34 "**client-device 32 is a thin-client that does not require software to be installed other than a web browser 33...no additional plug-in is needed for browser...**").

As per claim 9:

Nelson further discloses:

- the Application Program Interface identifying parameters of the method (see at least col. 6 "**TABLE I**").

As per claim 10:

Nelson further discloses:

- allowing specification of which server-side methods are included in the Application Program Interface (see at least col. 5 "**TABLE I**").

As per claim 12:

Merrill further discloses:

- wherein executing the interpreted script language program includes converting the parameters sent to the server side (see at least col. 23, lines 1-5 "**Clients invoke this method to instruct the server to generate speech output for a**

specified text string. Clients specify a text string, which the speech output engine converts into digitized audio output. The animation server plays clip...").

As per claim 13:

Merrill further discloses:

- wherein executing the interpreted script language program includes converting results sent from the server side (see at least col. 24, lines 58-61 "**The server generates this event when it encounters a bookmark tag in a text string as it converts the text string into speech output. The client can insert this tag in the text string provided with a Speak method**").

As per claim 17:

Nelson discloses:

- receiving interpreted script language program that is automatically created by the ser-side and that contains calls to the server-side software method in accordance with an Application Program Interface (see at least col. 8, lines 53-55 "**converter 27 generates the client-side script, packet engine 21 transmits the script to web browser 33**"); and

- executing the interpreted script language program on the client side to call the server-side software method (see at least col. 8, lines 55-56 "**upon receiving the script, client device 9 executes the script**").

Nelson does not explicitly disclose:

- interpreted script language program contains calls to server-side software method.

However, Merrill discloses:

- interpreted script language program contains calls to server-side software method (see at least col. 35, lines 3-15 "**to execute the script code, the browser used the interpreter to translate the code and then accesses the OLE control interface in response to references to the control interface in the script code...when the script code references the character control, the browser accesses the animation server**" – the script contains calls to the server-side method so when executing the script on the client side, it invokes the server-side method to allow the browser access the server).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to include the invoking the server process of Merrill in Nelson's approach. One would have been motivated to allow a central server to store software programs to prevent from having multiple version of copied software programs store at multiple client side. By doing this, reducing software redundancy, the client side does not need to have extra memory for storing the software program, etc.

As per claim 18:

Merrill further discloses:

- passing parameters to the server-side method when the interpreted script
  language program is executed on the client side (see at least col. 37, lines 41-
  50).

As per claim 19:

Merrill further discloses:

- receiving results from the server-side method when interpreted script language
  program is executed on the client side (see at least col. 38, lines 29-31 "**it
  causes the action associated with the request object to be terminated,
  either by stopping an on-going action or by preventing a still-scheduled
  action...**" – stopping an action is the result from the server side method).

7.   Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson
et al. (Patent No.: US 6,188,400 B1) and Merrill et al. (Patent No.: US 6,369,821 B2) as
applied to claim 2 above, and further in view of Guthrie et al. (Patent No.: US 6,549,955
B2).

As per claim 3:

Neither Nelson nor Merrill disclose:

- wherein executing the interpreted script language program include creating a
  program language object having the same name as a server-side programming
  language bean.

However, Guthrie discloses an analogous process for creating a programming language object having the same name as a server-side programming language bean (see at least col. 5, lines 57-59 **"remote proxy class (a category of objects) 23 is generated on client system based on the name, interfaces and methods of subject object 18 which my reside on server system...."**; also see at least col. 6, lines 39-56 **"reflection is a process that determines what an object can do, how it is defined... reflection mirrors the public view of an object to collect information...the reflection process includes the following: name, list of implemented interface; list of methods; and superclass information."**).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Nelson and Merrill's approaches to include the refection process. The modification is obvious because one of the ordinary skilled in the art would have been motivated to include the reflection process to facilitate the creation of proxies, which resemble objects on the public view, but are very different internally, or privately (col. 6, lines 42-43).

8.   Claims 5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (Patent No.: US 6,188,400 B1) and Merrill et al. (Patent No.: US 6,369,821 B2), in view of Mikhail et al. (Pub No.: 2003/0218633 A1).

As per claim 5:

Neither Nelson nor Merrill disclose:

- registering the server-side method on the server side, wherein the registering

    includes identifying the registered server-side methods.

However, Mikhail discloses an analogous process for registering the server-side

method on the server side, wherein the identifying includes identifying the registered

server side methods ("**the bean registers itself with the Sybase notification server,**

specifying a callback method for the desired notification" paragraph 0042).

Therefore, it would have obvious to one having an ordinary skill in the art at the time

the invention was made to modify Nelson's approach to include registering beans on the

server. The modification is obvious because one of the ordinary skilled in the art would

have been motivated to register the beans on server for the server to remote the beans

interface to the client in form of JavaScript™ object. This allows the programmer to call

any of the bean's methods from the JavaScript™.

As per claim 6:

Mikhail further discloses:

- wherein no methods are specified, thereby identifying all methods of a bean (see

    at least paragraph [0042] "**specifying a callback method for the desired**

    notification").

As per claim 7:

Mikhail further discloses:

- wherein a subset of methods are specified, thereby identifying the subset of methods (see at least paragraph [0042] **"for each Sybase notification to be handled, the application server creates at least one Java™ bean. The bean registers itself...specifying a callback method for the desired notification"** - there are multiple beans are created and each specifying a callback method. The subset of methods is the subset of callback methods for these beans).

As per claim 8:

Mikhail further discloses:

- wherein registration is performed using JSP tags. It is inherent in Mikhail's process because JSP tags are included in Mikhail (paragraph 0034).

As per claim 11:

Mikhail further discloses:

- wherein the method is a method in a program language bean (see at least paragraph [0042] **"for each Sybase notification to be handled, the application server creates at least one Java™ bean. The bean registers itself...specifying a callback method for the desired notification"**).

Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip H. Nguyen whose telephone number is (571) 270-1070. The examiner can normally be reached on Monday - Thursday 10:00 AM - 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PN
8/29/2007

WEI ZHEN
SUPERVISORY PATENT EXAMI,